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NOTICE OF ALLOWANCE AND FEE(S) DUE

826

7590

CHARLOTTE, NC 28280-4000

09/04/2008

ALSTON & BIRD LLP BANK OF AMERICA PLAZA 101 SOUTH TRYON STREET, SUITE 4000 EXAMINER

BHAT, NINA NMN

ARTINIT PAPER NUMBER

1707

DATE MAILED: 09/04/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/680,388	10/07/2003	Fabrice Chopard	046190/269873	5865

TITLE OF INVENTION: ADVANCED DEVICE FOR EXCHANGE AND/OR REACTION BETWEEN FLUIDS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	I2/04/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown

B. If the status above is to be removed, check box 5b on Part B -Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

On Missioner for Patents
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or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further a indicated unless correcte maintenance fee notificat	form should be used to correspondence including to below or directed off tions.	for transmitting the ISS ng the Patent, advance of nerwise in Block 1, by (red). Blocks 1 through 5 still be mailed to the current and/or (b) indicating a sep		
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)			Note Fee(pape have	Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, mus have its own certificate of mailing or transmission.			
	IRD LLP ERICA PLAZA YON STREET, SU	172008 TTE 4000	I he	Cert	ificate of Mailing or Trans is Fee(s) Transmittal is bein th sufficient postage for fir Stop ISSUE FEE address O (571) 273-2885, on the o	g deposited with the United	
CHARLOTTE, N	NC 28280-4000					(Depositor's name)	
						(Signature)	
						(Date)	
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/680,388 TITLE OF INVENTION:	10/07/2003 : ADVANCED DEVICE	E FOR EXCHANGE AN	Fabrice Chopard D/OR REACTION BETW	EEN FLUIDS	046190/269873	5865	
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	FEE TOTAL FEE(S) DUE	DATE DUE	
nonprovisional	NO	\$1440	\$300	\$0	\$1740	12/04/2008	
EXAM	INER	ART UNIT	CLASS-SUBCLASS				
BHAT, NI	NA NMN	1797	422-190000	•			
"Fee Address" indi PTO/SB/47; Rev 03-0. Number is required. 3. ASSIGNEE NAME AT	ondence address (or Cha 3/122) attached. ication (or "Fee Address 2 or more recent) attach ND RESIDENCE DAT. ess an assignee is ident in in 37 CFR 3.11. Comp	" Indication form ted. Use of a Customer A TO BE PRINTED ON	2. For printing on the p (1) the names of up to or agents OR, alternativ (2) the name of a single registered attorney or a 2 registered patent atto listed, no name will be THE PATENT (print or tyg- data will appear on the p T a substitute for filing an (B) RESIDENCE: (CITY	3 registered patent rely, e firm (having as a agent) and the name rievs or agents. If n printed. be) atent. If an assigne assignment.	attorneys 1	document has been filed for	
Please check the appropri	iate assignee category or	categories (will not be p	rinted on the patent):	Individual 🗖 Co	rporation or other private gr	oup entity 🗖 Government	
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	s SMALL ENTITY state	is. See 37 CFR 1.27.			L ENTITY status. See 37 C		
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This collection of informa an application. Confident submitting the completed this form and/or suggestion Box 1450, Alexandria, V.	ation is required by 37 C iality is governed by 35 I application form to the ons for reducing this bu irginia 22313-1450. DO	CFR 1.311. The informati U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the ONOT SEND FEES OR	on is required to obtain or r 1.14. This collection is est 7 depending upon the indiv the Chief Information Office COMPLETED FORMS TO	etain a benefit by th imated to take 12 m idual case. Any cor rr, U.S. Patent and T D THIS ADDRESS.	te public which is to file (an inutes to complete, includi nments on the amount of ti Frademark Office, U.S. Dep SEND TO: Commissioner	d by the USPTO to process, ng gathering, preparing, and me you require to complete partment of Commerce, P.O. for Patents, P.O. Box 1450	

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10/680.388

UNITED STATES PATENT AND TRADEMARK OFFICE

10/07/2003

UNITED STATES DEPARTMENT OF COMMERCE

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EXAMINER 826 7590 00/04/2008

ALSTON & BIRD LLP BANK OF AMERICA PLAZA ARTINIT

101 SOUTH TRYON STREET, SUITE 4000 1707 CHARLOTTE, NC 28280-4000 DATE MAILED: 09/04/2008

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 839 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 839 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

	Application No.	Applicant(s)			
AL 41	10/680,388	CHOPARD ET AL.			
Notice of Allowability	Examiner	Art Unit			
	N. Bhat	1797			
The MAILING DATE of this communication apperature and claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this app or other appropriate communication IGHTS. This application is subject to	plication. If not included will be mailed in due course. THIS			
1. \boxtimes This communication is responsive to <u>the RCE filed 6-16-20</u>	<u>008</u> .				
2. \boxtimes The allowed claim(s) is/are <u>2-25 and 28 re-numbered as 2-</u>	-25 and 1 respectively.				
Acknowledgment is made of a claim for foreign priority ur a) ☑ All b) ☐ Some* c) ☐ None of the: 1. ☑ Certified copies of the priority documents have					
Certified copies of the priority documents have					
Copies of the certified copies of the priority documents have					
International Bureau (PCT Rule 17.2(a)).	sumerite flave been reserved in this	material stage application from the			
* Certified copies not received:					
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		complying with the requirements			
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give					
5. CORRECTED DRAWINGS (as "replacement sheets") mus	st be submitted.				
(a) ☐ including changes required by the Notice of Draftspers	on's Patent Drawing Review (PTO-	948) attached			
1) hereto or 2) to Paper No./Mail Date					
(b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date					
Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in t					
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.					
Attachment(s)					
1. Notice of References Cited (PTO-892)	5. Notice of Informal P	• •			
2. Notice of Draftperson's Patent Drawing Review (PTO-948)	 Interview Summary Paper No./Mail Dat 				
Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date	7. Examiner's Amendr				
4. Examiner's Comment Regarding Requirement for Deposit	8. 🛛 Examiner's Stateme	ent of Reasons for Allowance			
of Biological Material	9.				

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Art Unit: 1797

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37

CFR 1.114. Applicant's submission filed on June 16, 2008 has been entered.

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR
 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the

The application has been amended as follows:

In the Abstract:

payment of the issue fee.

On a Separate Page following the claims:

Insert--Abstract of the Disclosure

A device for exchange and/or reaction between at least two fluids is taught and described herein comprising at least a first space of selected thickness and including side walls defining a first chamber provided with a central part at least partly recessed for a first fluid flow and at least a second chamber for a second fluid flow, the first and second chambers being separated by a first exchanging wall adapted to ensure exchange and/or reaction between fluids of thermal and/or mass transfer type.—

3. Applicant's amendments and arguments regarding obviousness rejection made over Romatier and Berthou et al. have been fully and carefully considered and are found to be persuasive. The following is an examiner's statement of reasons for allowance: The prior art fails to teach and/or suggest a reactor structure which includes a first space with a recessed center part forming a first chamber, the second chamber formed between the first exchange wall Application/Control Number: 10/680,388 Page 3

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and a second exchange wall, the first and second exchange walls being stacked one to the other and second exchange wall being an independent wall or close side wall a second spacer and wherein each spaced and each exchange wall is provided with two or three holds in one its ends and two or three holes in its opposite end.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

 Any inquiry concerning this communication or earlier communications from the examiner should be directed to N. Bhat whose telephone number is 571-272-1397. The examiner can normally be reached on Monday-Friday, 9:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/N. Bhat/ Primary Examiner, Art Unit 1797